ESSENCE
for Local Public Health Agencies

Q: What is ESSENCE?

A: *Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE) software takes electronic emergency department (ED) data and groups chief complaints into 'syndrome' categories. This information is used to determine if the number of visits is greater than expected for that facility, based on historical data and statistical analyses.*

Q: How often does DHSS receive electronic data from reporting sites?

A: *Some hospitals send data in near real-time while others send batches once per day. Every weekday hospital records are loaded into ESSENCE and someone from the Office of Emergency Coordination reviews the data for the detection of unusual patterns.*

Q: What syndrome groups does ESSENCE analyze?

A: *The syndrome groups are: Botulism-like, Fever, Gastrointestinal, Hemorrhagic, Neurological, Rash, Respiratory, and Shock/Coma.*

Q: How is ESSENCE used for early event detection?

A: *ESSENCE displays the number of ED visits in each syndrome category that occurred in a given day. The system will "flag" a syndrome group whose number of visits was significantly higher than the expected number, based on historical data. The overall goal is to detect anomalies as early as possible to contain, mitigate and/or prevent further the effects of health events, such as naturally occurring outbreaks or acts of bioterrorism.*

Q: How is ESSENCE used for situational awareness?

A: *ESSENCE can be used during ongoing health events to track impact in terms of time, geography, and demography.*

Q: How will using ESSENCE benefit local public health agencies?

A: *ESSENCE may provide a way to double-check findings from your existing surveillance procedures and can help you do local situational awareness during health-related events such as power outages and known disease outbreaks. Also, you may use ESSENCE as part of enhanced surveillance during the county fair, local tournaments, or other large gatherings of people to detect health events as early as possible.*

Q: Are LPHAs responsible for monitoring ESSENCE on a daily basis?

A: *DHSS staff are responsible for daily ESSENCE viewing and communications. LPHAs are provided with ESSENCE access to enhance their own disease tracking efforts and, should the need arise, make communications regarding suspicious anomalies quicker and more accurate for both DHSS and LPHA staff.*

Q: How often can I expect to hear from DHSS regarding a suspicious cluster?

A: *Individuals using ESSENCE for public health surveillance at the state level make every attempt to resolve anomalies using DHSS resources. However, on occasion, it may be necessary for DHSS to seek the expertise of the LPHA. LPHA staff may simply be asked to view ESSENCE and give an opinion about its findings, contact their local hospital, or undertake an investigation.*

Q: How much information on residents and/or hospitals in my jurisdiction are included in ESSENCE?

A: *The attached map shows the location of current and future ESSENCE participating hospitals. It also includes the average number of visits to ESSENCE hospitals per day during a one-week period for each county. This may help you to determine whether to sign up your staff for ESSENCE at this time.*

Q: How do I acquire ESSENCE?

A: *ESSENCE is entirely web-based so no software needs to be installed or site license obtained. A limited number of users at each LPHA will be granted a username and password, after completing a DHSS Automated Security Access Processing (ASAP) Network Request Form online. The requirements for obtaining ESSENCE access are: 1) Approval by your supervisor via the ASAP process; 2) A signed confidentiality statement is on file with your supervisor; 3) Confirmation that you have received a copy of the Missouri ESSENCE Policies document and agree to follow the policies.*

Q: What kind of data security is maintained by DHSS and within ESSENCE?

A: *While viewing ESSENCE, identifying information such as name, address and social security number are not included. However, we still want to maintain a secure environment for the data. Therefore, usernames and passwords should be kept confidential and must not be shared. Data security should be maintained during e-mailing, storage, and use of ESSENCE data to protect the patient, physician, and hospital's identity.*

Q: What HIPAA issues should I be aware of as an ESSENCE user?

A: *These data are being transmitted for public health purposes and are covered under the reporting rule 19 CSR 10-33.040. ESSENCE data should be handled in the same manner as any other confidential information typically used in the LPHA setting (communicable disease, STD, other case reports).*

Q: Are there any other privacy issues I should be aware of?

A: *The reporting rule states that information specific to any patient, physician, or hospital should not be shared with individuals outside of public health. This means that care must be taken to not divulge this information during press conferences, conversations with media, public meetings, or in publications.*

Q: Will DHSS train new ESSENCE users?

A: *Yes, DHSS will provide self-study materials for new users, followed by in-person or web-based training sessions, based on user feedback. Policies and communications protocols will be provided along with training materials. DHSS will design a follow-up training program based on feedback provided by ESSENCE users.*

Q: Whom do I contact if I have questions?

A: *The Missouri ESSENCE Project can be contacted at 573-751-6161 or ESSENCE@dhss.mo.gov.*

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